Catalyst 1600

This chapter provides information on the Catalyst 1600 Token Ring switch. The information is organized into the following sections:

- Product Overview
- Standard Features
- Product Numbers
- Configuration Worksheet

Note Documentation for the Catalyst 1600 is available in two forms: on a CD-ROM called Cisco Connection Documentation, Enterprise Series (formerly called UniverCD) and printed books. You can request a free copy of the documentation CD when you place an order and have the option of subscribing to a CD update service. A user guide ships with each Token Ring switch.

You can also access Cisco technical documentation on the World Wide Web URL http://www.cisco.com. For more information, see the chapter "Documentation" at the end of the catalog.

Product Overview

The Catalyst 1600 is an 8- or 12-port Token Ring switch with optional FDDI support. It provides campus and building backbone segment switching as well as dedicated full-duplex connections to file servers. The Catalyst 1600 is the ideal solution for network administrators who need to replace slow, PC-based source-route bridges with a fast, cost-effective, manageable solution. Other applications include sites with existing router-based collapsed backbones where there is a need to centralize servers and replace existing 16-Mbps backbone rings with a switch.

The modular chassis comes with a supervisor engine in the top slot and four-port Token Ring modules in the next two slots, for a total of eight Token Ring ports. An optional slot is provided to add another four-port module or to add an FDDI or a future ATM high-speed interface. With support for source-route bridging and the implementation and management of virtual LANs (VLANs), the Catalyst 1600 Token Ring switch delivers all of the performance and management requirements for switched Token Ring server and backbone applications.

The four-slot chassis features a switch-activated LCD display to provide real-time port statistics and status information. The Catalyst 1600 supports a required Supervisor Engine and a combination of interface modules. The Supervisor Engine module enables switching and network management and provides a monitoring port for out-of-band management and a console interface for configuration.

The Catalyst 1600 Token Ring switch includes the following components:

- Four-slot rack-mounted chassis

- Supervisor engine module

- Any combination of the following modules:

  — Four-port switch module—4- or 16-Mbps Token Ring, full or half duplex

  — FDDI module—dual attachment station (DAS), 100-Mbps FDDI (available Q3 1996)

  — ATM module—OC-3, 155-Mbps ATM (available Q1 1997)

- 120/240 VAC power supply
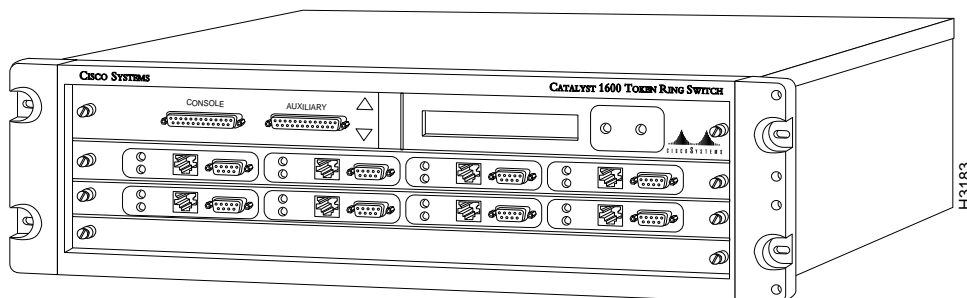
Figure 129 Catalyst 1600 Token Ring Switch

Table 272 Catalyst 1600 Summary of Features

Characteristics	Description
Placement	Rack-mounted (standard 19-inch rack, 3 RU[1] high)
Memory	8 MB, dynamically allocated buffer memory
Performance	Throughput: 300,000 pps aggregate Latency: less than 40 microseconds (64-byte to 4-kilobyte frames)
Network protocols	IEEE 802.5 Token Ring, 4 or 16 Mbps
Interfaces	8 Token Ring ports, expandable to 12 Master/slave and 4 or 16 Mpbs supported on all ports (software configurable) Shielded RJ-45 for UTP or STP DB9 for STP cable 2 EIA/TIA-232 interfaces to support out-of-band management and diagnostics FDDI, DAS (available Q3 1996) ATM, OC-3 (available 1996)
Media	Choice of Category 3 and 5 UTP cable and Type 1 and 2 STP cable

Characteristics	Description
Network Management	SNMP over IP and IPX Bridge MIB (RFC 1493) SNMP MIB II (RFC 1213) Source-route extensions (RFC 1525) Token Ring MIB (RFC 1512)
Safety	UL 1950 CSA M89-950 EN 60950
Agency approvals	FCC Class A CSA Doc Class A EN 55022 (CISPR 22, Class A) CE Mark
Dimensions (H x W x D)	19 x 5.25 x 12.5" (48.3 x 13.3 x 31.9 cm)

1. RU = Rack Unit = 1.75 inches.

Table 273   Catalyst 1600 Environmental Specifications

Description	Specification
Weight	Fully configured: 21.6 lb (9.8 kg)
AC input voltage	90-250 VAC, 50/60 Hz
Operating temperature range	32 to 104 F (0 to 40 C)
Humidity (noncondensing)	10 to 90%

Standard Features

The Catalyst 1600 Token Ring switch supports the following features:

- High-performance, low-latency switching using Madge RingRunner Token Ring switching technology

- Eight or twelve switched Token Ring ports per chassis, providing dedicated LAN connectivity

- 4- or 16-Mbps and future full-duplex connections on all ports

- Master or slave modes on all ports, configurable on a per-port basis

- Cost-effective switch expansion through full-duplex interswitch links

- DAS FDDI interface option (available Q3 1996)

- OC-3 ATM interface option (available Q1 1997)

- Fully integrated support for VLANs

- Support for out-of-band management through a terminal or modem attached to the monitoring ports; EIA/TIA-232 interface; in-band management through SNMP

- CiscoWorks network management integration with the CiscoView application for a Catalyst 1600 chassis physical view, configuration, performance monitoring, and troubleshooting

- Fully interoperable with the Cisco 7000 family of routers, performing source-route bridging over FDDI networks

Product Numbers

Table 274 describes the product numbers associated with the Catalyst 1600.

Table 274   Catalyst 1600 Product Numbers

Description	Product Number
Catalyst 1600 chassis with 8 ports	WS-C1600
Catalyst 1600 FDDI module	WS-C161F
Catalyst 1600 Token Ring module with 4 ports	WS-C164R
SMARTnet maintenance	CON-SNT-WS-C1600

Configuration Worksheet

Use the Catalyst 1600 Configuration Worksheet that follows to help you plan your order or to upgrade an existing system.

Catalyst 1600 Configuration Worksheet

Base unit, 8 ports	WS-C1600	☐
Optional line card, one per system:		
4-port Token Ring Switch Module	WS-C164R	☐
A/B port FDDI module (MIC)	WS-C161F	☐

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